

Remarks

Claims 1-9 and 11-21 were pending.

Claims 1, 2 and 7 are amended.

Claims 4 and 8 are original.

Claims 3, 5, 6, 9 and 11-21 are as previously presented.

Claim 22 is new.

The application now contains claims 1-9 and 11-22.

Claims 1 and 7 are amended to insert the term "organic" immediately before the term "pigment", delete the term "comprising" and insert in its stead "consisting of", and to limit Q to a hydrocarbon radical containing from 12 to 24 carbon atoms instead of 8 to 24. Claim 1 is further amended to insert the limitation "and from 0 to 20 % by weight of further substances" to the description of the binder, and claim 7 is further amended to delete the word "optionally" immediately prior to the term "from 0 to 20 % by weight of further substances". Support is found in the specification on page 4, line 6, page 3 lines 14-15 and page 3 lines 19-21.

Claim 2 is amended to delete the now unnecessary phrase "and Q has at least 12 carbon atoms".

Support for new claim 22 is found in claim 1.

No new matter is added.

Rejections

Claims 1-6 and 11-18 are rejected under 35 USC 103(a) as being obvious over the combination of GB 1,176,217 and Pollard, US 3,728,143 in view of Macmahon, et.al., US 4,264,552.

GB 1,176,217 discloses grinding pigments with an aqueous solution of hydroxyalkylcellulose ethers to prepare a composition which uniformly colors coatings, plastics etc. There is no mention of using amines, amides or esters. Pollard US 3,728,143 discloses a pigment treated with fatty acid amides. The Action states that it would be obvious to combine Pollard with GB 1,176,217 to produce the instant pigment composition. Macmahon, US 4,264,552, provides a pigment composition wherein, for reasons of cost, the additive is preferably present in amounts of as little as 0.5 – 20% .

Applicants respectfully traverse the rejections.

Applicants first respectfully point out that the teachings of GB 1,176,217 and Pollard, US 3,728,143 can not be combined as they are contradictory. GB 1,176,217 teaches grinding pigments with an aqueous solution of hydroxyalkylcellulose ethers whereas Pollard, '143, coats a pigment by adding it to molten amides at elevated temperatures, (the examples therein cite temperatures of 200°C and 210-212°F, ex 79), under solvent free conditions, column 4 lines 1-42. Applicants additionally note that '217 requires wet-milling, while '143 requires the pigments to be dispersed into molten resin; cellulose does not melt, while the resins of '143 are not soluble in water.

Applicants submit that the temperatures of Pollard, the solvent free conditions of Pollard and the processing methods therein are incompatible with the aqueous solutions of GB 1,176,217, particularly given the bp of water. Given this incompatibility, Applicants submit that the practitioner could not realistically combine the two pieces of art to arrive at a cellulose/amide binder similar to that of the instant invention.

Applicants further respectfully point out that even if one combined GB 1,176,217 and Pollard, US 3,728,143 and Macmahon, et.al., US 4,264,552, it would still not provide the limitations of the instant claims.

For example, GB 1,176,217 discloses pigment compositions comprising at most 90% of pigment, especially from 20 to 80% of pigment (page 2 / lines 22-24). US 3,728,143 teaches pigment compositions comprising at most 90% of inorganic pigment, or at most 75% of organic pigment (column 3 / lines 72- 75). This difference in maximum pigment amounts for inorganic and organic pigments disclosed in Pollard reflects the well known greater tendency for organic pigments to aggregate, requiring a higher amount of binder.

The instant compositions contain between 92-97% of **organic** pigment, higher than the 90% of '217 and the 75% of '143.

The instant compositions also contain at most, 4.8% of a cellulose derivative ($8\% \times 60\% = 4.8\%$) compared with the at least 10%, preferably 20%, cellulose derivative found in '217. Furthermore, even if the skilled artisan replaced part of the binder of '217 with an amine, amide or ester, he would still not reduce the total amount of binder to the instant very low quantity.

The Action notes that Macmahon provides a pigment composition wherein, for reasons of cost, the additive is preferably present in amounts of as little as 0.5 – 20%, and states that it is therefore known to use lower levels of binder, and thus higher levels of pigments, in pigment compositions than the levels found in '217 and '143 above. However, Macmahon uses a different binder than found in either the instant application or the other cited art Applicants respectfully assert, especially given the unpredictability of chemistry, that there is no reason for one to believe that because certain ingredients are active at a certain level, that other ingredients would be active at the same level.

Applicants also respectfully point out that the motivation to limit the amount of additives for cost reasons was also present for the inventors of GB 1,176,217 and Pollard, US 3,728,143, yet the highest level of pigment present in either case was 90%. Applicants' invention can therefore be seen as providing a novel means for attaining this long sought economic goal.

Further regarding the 'binder components' of , Macmahon '552, Applicants note that the examples of '552 include as part of the "binder" large amounts of water and that the amount of polyethylene oxides relative to the remaining solids component of the binder is much higher than the 20% further materials allowed in the instant claims.

Thus, Applicants respectfully maintain that the teachings of GB 1,176,217 and Pollard, US 3,728,143 are incompatible, that their combination still would not meet the limitations of the instant claims and the high polyethylene oxide content of the binder compositions of US 4,264,552, place that disclosure well outside the instant invention.

Given the amendments and discussion above, applicants respectfully submit that the rejections of claims 1-6 and 11-18 under 35 USC 103(a) over GB 1,176,217 and Pollard, US 3,728,143 in view of Macmahon, et.al., US 4,264,552 are addressed and are overcome and kindly ask that the rejections be withdrawn.

Claims 7, 9, 20 and 21 are rejected under 35 USC 103(a) as being obvious over the above combination of GB 1,176,217 and Pollard, US 3,728,143 in view of Macmahon, et.al., US 4,264,552 in further view of Schneider, et.al., US 5,681,876.

Claim 19 is rejected under 35 USC 103(a) as being obvious over the above combination of GB 1,176,217, Pollard, US 3,728,143, Macmahon, et.al., US 4,264,552, and Schneider, US 5,681,876 in view of Kurtz, US 5,082,498.

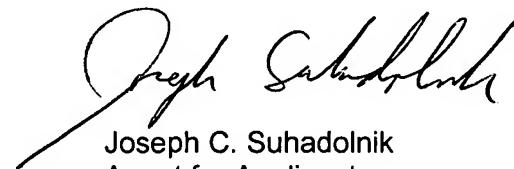
Applicants respectfully traverse the rejections.

Applicants refer to the above discussion regarding '217, '143 and '552 and note that Schneider, et.al., US 5,681,876 does not overcome these deficiencies nor does Kurtz, US 5,082,498.

In light of the above amendments and discussion, Applicants respectfully submit that all rejections and objections are addressed and are overcome and kindly ask that they be withdrawn and claims 1-9 and 11-22 be found allowable.

In the event that minor amendments will further prosecution, Applicants request that the examiner contact the undersigned representative.

Respectfully submitted,



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